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EXAMINER	
ALI, MOHAMMAD	

ART UNIT	PAPER NUMBER
2177	17

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application N .	Applicant(s)	
	09/578,302	MILIC-FRAYLING ET AL.	
	Examin r	Art Unit	
	Mohammad Ali	2177	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 February 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *12-95* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *12-95* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This communication is in response to the RCE filed on February 24, 2004. Claims 12-95 are pending in this Office Action.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 12-95 are rejected under 35 U.S.C. 102(a) as being unpatentable over Kravets et al. ('Kravets' hereinafter), US Patent 6,363,377 B1 in view of Gottsman et al. ('Gottsman' hereinafter), US Patent 6,134,548.

As to claim 12, Kravets discloses a computer implemented method of enhancing query results provided independent of a search engine (col. 1, lines 13-16). Kravets teaches 'sending a query to an independent search engine' as when the user poses a query, the browser generates a number of related queries and sends all the queries to the search engine (col. 11, lines 63-65). Further, Krates teaches 'receiving query results from the search engine' as the time to receive the complete results for the users query and just the number of matches for each of the related queries is asymptotically the same as the time to receive the results of just the user's query (col. 11, lines 65 to col. 12, line 1 et seq). Finally, Krates teaches 'generating information regarding the relevancy of the query results based at least in part upon a user model and independent of the search engine' as the number of reformulation iterations used to find the relevant information. When the user poses a query, the browser generates a number of related queries and sends all the queries to the search engine (col. 11, lines 63-65 and col. 9, lines 52-64 et seq).

Kravets does not explicitly indicate the claimed user model.

Gottsman discloses claimed user model (each User Persona has the Persona data model and has many number of active User Intentions. Each active User Intention is given a Nickname which is the display name the user sees on the screen, see col. 35, lines 50-57, Figs. 12-14).

It would have been obvious to one ordinary skill in the data processing art at the time of the present invention to combine the teachings of the cited references because the user model of Gottsman's teaching would have allowed Kravets system to provide

the most up-to-date information about an event, drawing from a number of resources to the user to react optimally in a given situation, as suggested by Gottsman at col. 39, lines 45-48. Further, user model as taught by Gottsman improves to facilitate web-based comparison shopping in conventional, physical, non-web real environments (see col. 1, lines 55-57 et seq).

As to claim 16, Kravets discloses a computer implemented method of enhancing query results provided independent of a search engine (col. 1, lines 13-16). Kravets teaches 'sending a query to an independent search engine' as when the user poses a query, the browser generates a number of related queries and sends all the queries to the search engine (col. 11, lines 63-65). Further, Krates teaches 'creating a context based on a computer user's interest' as all cluster which receives a yes vote are save along with the query in a search context folder. A user has the ability to find a query and its results by either browsing the search context folders of doing a keyword based search for them among all the search context folders (col. 7, lines 61-65 et seq). Krates teaches 'receiving query results from the search engine' as the time to receive the complete results for the users query and just the number of matches for each of the related queries is asymptotically the same as the time to receive the results of just the user's query (col. 11, lines 65 to col. 12, line 1 et seq). Finally, Krates teaches 'generating information regarding relevancy of the query results independent of the search engine' as the number of reformulation iterations used to find the relevant information. When the user poses a query, the browser generates a number of related queries and sends all the queries to the search engine (col. 11, lines 63-65 et seq).

Kravets does not explicitly indicate the claimed user model.

Gottsman discloses claimed user interests (each User Persona has the Persona data model and has many number of active User Intentions. Each active User Intention is given a Nickname which is the display name the user sees on the screen, see col. 35, lines 50-57, Figs. 12-14).

It would have been obvious to one ordinary skill in the data processing art at the time of the present invention to combine the teachings of the cited references because the user interests of Gottsman's teaching would have allowed Kravets system to provide the most up-to-date information about an event, drawing from a number of resources to the user to react optimally in a given situation, as suggested by Gottsman at col. 39, lines 45-48. Further, user interests as taught by Gottsman improves to facilitate web-based comparison shopping in conventional, physical, non-web real environments (see col. 1, lines 55-57 et seq).

As to claim 18, Kravets discloses a computer implemented method of enhancing query results provided independent of a search engine (col. 1, lines 13-16). Kravets teaches 'sending a query to an independent search engine' as when the user poses a query, the browser generates a number of related queries and sends all the queries to the search engine (col. 11, lines 63-65). Further, Krates teaches 'receiving query results from the search engine' as the time to receive the complete results for the users query and just the number of matches for each of the related queries is asymptotically the same as the time to receive the results of just the user's query (col. 11, lines 65 to col. 12, line 1 et seq). Krates teaches 'enhancing the query based at least in part upon a

user model' as refining and improving ('enhancing') search queries and for organizing the results of a search query by different and overlapping criteria (col. 1, lines 14-16, col. 9, lines 52-64 et seq). Krates teaches 'accessing the documents identified by the query results' as the set of keywords from the search query are used to rank the documents returned by the search engine (col. 7, lines 38-40 et seq). Krates teaches 'applying the enhanced query to the retrieved documents' as refining and improving (enhancing) search queries and for organizing the results of a search query by different and overlapping criteria (col. 1, lines 14-16). Finally, Krates teaches 'generating information regarding the relevancy of the query results from the results independent of the search engine' as the number of reformulation iterations used to find the relevant information. When the user poses a query, the browser generates a number of related queries and sends all the queries to the search engine (col. 11, lines 63-65 et seq).

Kravets does not explicitly indicate the claimed user model.

Gottsman discloses claimed user model (each User Persona has the Persona data model and has many number of active User Intentions. Each active User Intention is given a Nickname which is the display name the user sees on the screen, see col. 35, lines 50-57, Figs. 12-14).

It would have been obvious to one ordinary skill in the data processing art at the time of the present invention to combine the teachings of the cited references because the user model of Gottsman's teaching would have allowed Kravets system to provide the most up-to-date information about an event, drawing from a number of resources to the user to react optimally in a given situation, as suggested by Gottsman at col. 39,

lines 45-48. Further, user model as taught by Gottsman improves to facilitate web-based comparison shopping in conventional, physical, non-web real environments (see col. 1, lines 55-57 et seq).

As to claim 27, Kravets discloses a computer implemented method of enhancing query results provided independent of a search engine (col. 1, lines 13-16). Kravets teaches 'sending a query to an independent search engine' as when the user poses a query, the browser generates a number of related queries and sends all the queries to the search engine (col. 11, lines 63-65). Further, Krates teaches 'receiving ranked query results from the search engine' as the set of keywords from the search query are used to rank the documents returned by the search engine. The more keywords that appear in a document, the higher the document is ranked. The result organizer outputs results from the highest ranked to the lowest ranked (col. 7, lines 38-43 et seq). Krates teaches 'accessing the documents identified by the query results' as the set of keywords from the search query are used to rank the documents returned by the search engine (col. 7, lines 38-40 et seq). Finally, Krates teaches 're-ranking the query results based on information contained in retrieved documents' as the set of keywords from the search query are used to rank the documents returned by the search engine. The more keywords that appear in a document, the higher the document is ranked. The result organizer outputs results from the highest ranked to the lowest ranked (col. 7, lines 38-43 et seq).

Kravets does not explicitly indicate the claimed user model.

Gottsman discloses claimed user model (each User Persona has the Persona data model and has many number of active User Intentions. Each active User Intention is given a Nickname which is the display name the user sees on the screen, see col. 35, lines 50-57, Figs. 12-14).

It would have been obvious to one ordinary skill in the data processing art at the time of the present invention to combine the teachings of the cited references because the user model of Gottsman's teaching would have allowed Kravets system to provide the most up-to-date information about an event, drawing from a number of resources to the user to react optimally in a given situation, as suggested by Gottsman at col. 39, lines 45-48. Further, user model as taught by Gottsman improves to facilitate web-based comparison shopping in conventional, physical, non-web real environments (see col. 1, lines 55-57 et seq).

As to claim 29, Kravets discloses a computer implemented method of enhancing query results provided independent of a search engine (col. 1, lines 13-16). Kravets teaches 'sending a query to an independent search engine' as when the user poses a query, the browser generates a number of related queries and sends all the queries to the search engine (col. 11, lines 63-65). Further, Krates teaches 'receiving ranked query results from the search engine' as the set of keywords from the search query are used to rank the documents returned by the search engine. The more keywords that appear in a document, the higher the document is ranked. The result organizer outputs results from the highest ranked to the lowest ranked (col. 7, lines 38-43 et seq). Krates teaches 'augmenting the query based at least in part upon a user model' as the set of keywords

from the search query are used to rank the documents returned by the search engine (Fig 10(b), col. 7, lines 38-40, col. 9, lines 52-64 et seq). Finally, Krates teaches 're-ranking the query results based on augmented qauery' as the set of keywords from the search query are used to rank the documents returned by the search engine. The more keywords that appear in a document, the higher the document is ranked. The result organizer outputs results from the highest ranked to the lowest ranked (col. 7, lines 38-43 et seq).

Kravets does not explicitly indicate the claimed user model.

Gottsman discloses claimed user model (each User Persona has the Persona data model and has many number of active User Intentions. Each active User Intention is given a Nickname which is the display name the user sees on the screen, see col. 35, lines 50-57, Figs. 12-14).

It would have been obvious to one ordinary skill in the data processing art at the time of the present invention to combine the teachings of the cited references because the user model of Gottsman's teaching would have allowed Kravets system to provide the most up-to-date information about an event, drawing from a number of resources to the user to react optimally in a given situation, as suggested by Gottsman at col. 39, lines 45-48. Further, user model as taught by Gottsman improves to facilitate web-based comparison shopping in conventional, physical, non-web real environments (see col. 1, lines 55-57 et seq).

As to claim 30, Kravets discloses a computer implemented method of enhancing query results provided independent of a search engine (col. 1, lines 13-16). Kravets

teaches 'sending a query to an independent search engine' as when the user poses a query, the browser generates a number of related queries and sends all the queries to the search engine (col. 11, lines 63-65). Further, Krates teaches 'receiving ranked query results from the search engine' as the set of keywords from the search query are used to rank the documents returned by the search engine. The more keywords that appear in a document, the higher the document is ranked. The result organizer outputs results from the highest ranked to the lowest ranked (col. 7, lines 38-43 et seq). Krates teaches 'retrieving a document' as the set of keywords from the search query are used to rank the documents returned by the search engine (Fig 10(b), col. 7, lines 38-40 et seq). Finally, Krates teaches 'scrolling to a most relevant portion of the retrieved document based at least in part upon a user model' as the user is continuing a prior search session, then the history is retreived as shown in step 11 and the previous search's keywords are added to the search query (col. 3, lines 63-65, col. 9, lines 52-64 et seq).

Kravets does not explicitly indicate the claimed user model.

Gottsman discloses claimed user model (each User Persona has the Persona data model and has many number of active User Intentions. Each active User Intention is given a Nickname which is the display name the user sees on the screen, see col. 35, lines 50-57, Figs. 12-14).

It would have been obvious to one ordinary skill in the data processing art at the time of the present invention to combine the teachings of the cited references because the user model of Gottsman's teaching would have allowed Kravets system to provide the most up-to-date information about an event, drawing from a number of resources to

the user to react optimally in a given situation, as suggested by Gottsman at col. 39, lines 45-48. Further, user model as taught by Gottsman improves to facilitate web-based comparison shopping in conventional, physical, non-web real environments (see col. 1, lines 55-57 et seq).

As to claim 38, Kravets discloses a computer implemented method of enhancing query results provided independent of a search engine (col. 1, lines 13-16). Kravets teaches 'sending a query to an independent search engine' as when the user poses a query, the browser generates a number of related queries and sends all the queries to the search engine (col. 11, lines 63-65). Further, Krates teaches 'receiving query results from the search engine' as the time to receive the complete results for the users query and just the number of matches for each of the related queries is asymptotically the same as the time to receive the results of just the user's query (col. 11, lines 65 to col. 12, line 1 et seq). Krates teaches 'retrieving a document identified in the query result' as refining and improving ('enhancing') search queries and for organizing the results of a search query by different and overlapping criteria (col. 1, lines 14-16). Finally, Kravets teaches 'extracting names from the document and identifying associated links to such names based upon at least in part upon a user model' as refining and improving ('enhancing') search queries and for organizing the results of a search query by different and overlapping criteria (col. 1, lines 14-16, col. 9, lines 52-64 et seq).

Kravets does not explicitly indicate the claimed user model.

Gottsman discloses claimed user model (each User Persona has the Persona data model and has many number of active User Intentions. Each active User

Intention is given a Nickname which is the display name the user sees on the screen, see col. 35, lines 50-57, Figs. 12-14).

It would have been obvious to one ordinary skill in the data processing art at the time of the present invention to combine the teachings of the cited references because the user model of Gottsman's teaching would have allowed Kravets system to provide the most up-to-date information about an event, drawing from a number of resources to the user to react optimally in a given situation, as suggested by Gottsman at col. 39, lines 45-48. Further, user model as taught by Gottsman improves to facilitate web-based comparison shopping in conventional, physical, non-web real environments (see col. 1, lines 55-57 et seq).

As to claim 44, Kravets discloses a computer implemented method of enhancing query results provided independent of a search engine (col. 1, lines 13-16). Kravets teaches 'sending a query to an independent search engine' as when the user poses a query, the browser generates a number of related queries and sends all the queries to the search engine (col. 11, lines 63-65). Further, Krates teaches 'receiving query results from the search engine' as the time to receive the complete results for the users query and just the number of matches for each of the related queries is asymptotically the same as the time to receive the results of just the user's query (col. 11, lines 65 to col. 12, line 1 et seq). Krates teaches 'retrieving a document identified in the query result' as refining and improving ('enhancing') search queries and for organizing the results of a search query by different and overlapping criteria (col. 1, lines 14-16). Finally, Kravets teaches '...,relevancy of corresponding portions of the document, such thumbnail view

base at least in part upon a user model' as the number of reformulation iterations used to find the relevant information. When the user poses a query, the browser generates a number of related queries and sends all the queries to the search engine (col. 11, lines 63-65, col. 9, lines 52-64 et seq).

Kravets does not explicitly indicate the claimed user model.

Gottsman discloses claimed user model (each User Persona has the Persona data model and has many number of active User Intentions. Each active User Intention is given a Nickname which is the display name the user sees on the screen, see col. 35, lines 50-57, Figs. 12-14).

It would have been obvious to one ordinary skill in the data processing art at the time of the present invention to combine the teachings of the cited references because the user model of Gottsman's teaching would have allowed Kravets system to provide the most up-to-date information about an event, drawing from a number of resources to the user to react optimally in a given situation, as suggested by Gottsman at col. 39, lines 45-48. Further, user model as taught by Gottsman improves to facilitate web-based comparison shopping in conventional, physical, non-web real environments (see col. 1, lines 55-57 et seq).

As to claim 53, Kravets discloses a computer implemented method of enhancing query results provided independent of a search engine (col. 1, lines 13-16). Kravets teaches 'sending a query to an independent search engine' as when the user poses a query, the browser generates a number of related queries and sends all the queries to the search engine (col. 11, lines 63-65). Further, Krates teaches 'receiving query results

from the search engine' as the time to receive the complete results for the users query and just the number of matches for each of the related queries is asymptotically the same as the time to receive the results of just the user's query (col. 11, lines 65 to col. 12, line 1 et seq). Krates teaches 'retrieving a document identified in the query result' as refining and improving ('enhancing') search queries and for organizing the results of a search query by different and overlapping criteria (col. 1, lines 14-16). Finally, Kravets teaches '...,relevant portions of the document,...' as the number of reformulation iterations used to find the relevant information. When the user poses a query, the browser generates a number of related queries and sends all the queries to the search engine (col. 11, lines 63-65 and col. 9, lines 52-64 et seq).

Kravets does not explicitly indicate the claimed user model.

Gottsman discloses claimed user model (each User Persona has the Persona data model and has many number of active User Intentions. Each active User Intention is given a Nickname which is the display name the user sees on the screen, see col. 35, lines 50-57, Figs. 12-14).

It would have been obvious to one ordinary skill in the data processing art at the time of the present invention to combine the teachings of the cited references because the user model of Gottsman's teaching would have allowed Kravets system to provide the most up-to-date information about an event, drawing from a number of resources to the user to react optimally in a given situation, as suggested by Gottsman at col. 39, lines 45-48. Further, user model as taught by Gottsman improves to facilitate web-

based comparison shopping in conventional, physical, non-web real environments (see col. 1, lines 55-57 et seq).

As to claim 58, Kravets discloses a computer implemented method of enhancing query results provided independent of a search engine (col. 1, lines 13-16). Kravets teaches 'a module sends a query to an independent search engine' as when the user poses a query, the browser generates a number of related queries and sends all the queries to the search engine (col. 11, lines 63-65). Further, Krates teaches 'a module receives query results from the search engine' as the time to receive the complete results for the users query and just the number of matches for each of the related queries is asymptotically the same as the time to receive the results of just the user's query (col. 11, lines 65 to col. 12, line 1 et seq). Krates teaches 'a module retrieves a document identified in the query result' as refining and improving ('enhancing') search queries and for organizing the results of a search query by different and overlapping criteria (col. 1, lines 14-16). Finally, Kravets teaches '...,relevant portions of the document,...' as the number of reformulation iterations used to find the relevant information. When the user poses a query, the browser generates a number of related queries and sends all the queries to the search engine (col. 11, lines 63-65 and col. 9, lines 52-64 et seq).

Kravets does not explicitly indicate the claimed user model.

Gottsman discloses claimed user model (each User Persona has the Persona data model and has many number of active User Intentions. Each active User

Intention is given a Nickname which is the display name the user sees on the screen, see col. 35, lines 50-57, Figs. 12-14).

It would have been obvious to one ordinary skill in the data processing art at the time of the present invention to combine the teachings of the cited references because the user model of Gottsman's teaching would have allowed Kravets system to provide the most up-to-date information about an event, drawing from a number of resources to the user to react optimally in a given situation, as suggested by Gottsman at col. 39, lines 45-48. Further, user model as taught by Gottsman improves to facilitate web-based comparison shopping in conventional, physical, non-web real environments (see col. 1, lines 55-57 et seq).

As to claim 67, Kravets discloses a computer implemented method of enhancing query results provided independent of a search engine (col. 1, lines 13-16). Kravets teaches 'a module sends a query to an independent search engine' as when the user poses a query, the browser generates a number of related queries and sends all the queries to the search engine (col. 11, lines 63-65). Further, Krates teaches 'a module receives query results from the search engine' as the time to receive the complete results for the users query and just the number of matches for each of the related queries is asymptotically the same as the time to receive the results of just the user's query (col. 11, lines 65 to col. 12, line 1 et seq). Finally, Kravets teaches '...,relevant portions of the document,...' as the number of reformulation iterations used to find the relevant information. When the user poses a query, the browser generates a number of

related queries and sends all the queries to the search engine (col. 11, lines 63-65 and col. 9, lines 52-64 et seq).

Kravets does not explicitly indicate the claimed user model.

Gottsman discloses claimed user model (each User Persona has the Persona data model and has many number of active User Intentions. Each active User Intention is given a Nickname which is the display name the user sees on the screen, see col. 35, lines 50-57, Figs. 12-14).

It would have been obvious to one ordinary skill in the data processing art at the time of the present invention to combine the teachings of the cited references because the user model of Gottsman's teaching would have allowed Kravets system to provide the most up-to-date information about an event, drawing from a number of resources to the user to react optimally in a given situation, as suggested by Gottsman at col. 39, lines 45-48. Further, user model as taught by Gottsman improves to facilitate web-based comparison shopping in conventional, physical, non-web real environments (see col. 1, lines 55-57 et seq).

As to claim 69, Kravets discloses a computer implemented method of enhancing query results provided independent of a search engine (col. 1, lines 13-16). Kravets teaches 'a module sends a query to an independent search engine' as when the user poses a query, the browser generates a number of related queries and sends all the queries to the search engine (col. 11, lines 63-65). Further, Kravetes teaches 'a module receives query results from the search engine' as the time to receive the complete results for the users query and just the number of matches for each of the related

queries is asymptotically the same as the time to receive the results of just the user's query (col. 11, lines 65 to col. 12, line 1 et seq). Kravets teaches 'a module creates a context based on a computer user's interests' as all cluster which receives a yes vote are save along with the query in a search context folder. A user has the ability to find a query and its results by either browsing the search context folders of doing a keyword based search for them among all the search context folders (col. 7, lines 61-65 et seq). Kravets teaches 'a module retrieves a document identified in the query result' as refining and improving ('enhancing') search queries and for organizing the results of a search query by different and overlapping criteria (col. 1, lines 14-16). Finally, Kravets teaches '...,relevant portions of the document' as the number of reformulation iterations used to find the relevant information. When the user poses a query, the browser generates a number of related queries and sends all the queries to the search engine (col. 11, lines 63-65 et seq).

Kravets does not explicitly indicate the claimed user model.

Gottsman discloses claimed user model (each User Persona has the Persona data model and has many number of active User Intentions. Each active User Intention is given a Nickname which is the display name the user sees on the screen, see col. 35, lines 50-57, Figs. 12-14).

It would have been obvious to one ordinary skill in the data processing art at the time of the present invention to combine the teachings of the cited references because the user model of Gottsman's teaching would have allowed Kravets system to provide the most up-to-date information about an event, drawing from a number of resources to

the user to react optimally in a given situation, as suggested by Gottsman at col. 39, lines 45-48. Further, user model as taught by Gottsman improves to facilitate web-based comparison shopping in conventional, physical, non-web real environments (see col. 1, lines 55-57 et seq).

As to claim 71, Kravets discloses a computer implemented method of enhancing query results provided independent of a search engine (col. 1, lines 13-16). Kravets teaches 'a module sends a query to an independent search engine' as when the user poses a query, the browser generates a number of related queries and sends all the queries to the search engine (col. 11, lines 63-65). Further, Kravetes teaches 'a module receives query results from the search engine' as the time to receive the complete results for the users query and just the number of matches for each of the related queries is asymptotically the same as the time to receive the results of just the user's query (col. 11, lines 65 to col. 12, line 1 et seq). Kravets teaches 'a module creates a context based on a computer user's interests' as all cluster which receives a yes vote are save along with the query in a search context folder. A user has the ability to find a query and its results by either browsing the search context folders of doing a keyword based search for them among all the search context folders (col. 7, lines 61-65, col. 9, lines 52-64 et seq). Kravets teaches 'a module retrieves a document identified in the query result' as refining and improving ('enhancing') search queries and for organizing the results of a search query by different and overlapping criteria (col. 1, lines 14-16). Finally, Kravets teaches '...,relevant portions of the document' as the number of reformulation iterations used to find the relevant information. When the user poses a

query, the browser generates a number of related queries and sends all the queries to the search engine (col. 11, lines 63-65 et seq).

Kravets does not explicitly indicate the claimed user model.

Gottsman discloses claimed user model (each User Persona has the Persona data model and has many number of active User Intentions. Each active User Intention is given a Nickname which is the display name the user sees on the screen, see col. 35, lines 50-57, Figs. 12-14).

It would have been obvious to one ordinary skill in the data processing art at the time of the present invention to combine the teachings of the cited references because the user model of Gottsman's teaching would have allowed Kravets system to provide the most up-to-date information about an event, drawing from a number of resources to the user to react optimally in a given situation, as suggested by Gottsman at col. 39, lines 45-48. Further, user model as taught by Gottsman improves to facilitate web-based comparison shopping in conventional, physical, non-web real environments (see col. 1, lines 55-57 et seq).

As to claim 72, Kravets discloses a computer implemented method of enhancing query results provided independent of a search engine (col. 1, lines 13-16). Kravets teaches 'a module that sends a query to an independent search engine' as when the user poses a query, the browser generates a number of related queries and sends all the queries to the search engine (col. 11, lines 63-65). Further, Krates teaches 'a module that receives ranked query results from the search engine' as the set of keywords from the search query are used to rank the documents returned by the search

engine. The more keywords that appear in a document, the higher the document is ranked. The result organizer outputs results from the highest ranked to the lowest ranked (col. 7, lines 38-43 et seq). Krates teaches 'a module that retrieves,...' as the set of keywords from the search query are used to rank the documents returned by the search engine (Fig 10(b), col. 7, lines 38-40 et seq). Finally, Krates teaches 'a module that re-ranks the query results based on augmented qauery,...' as the set of keywords from the search query are used to rank the documents returned by the search engine. The more keywords that appear in a document, the higher the document is ranked. The result organizer outputs results from the highest ranked to the lowest ranked (col. 7, lines 38-43, col. 9, lines 52-64 et seq).

Kravets does not explicitly indicate the claimed user model.

Gottsman discloses claimed user model (each User Persona has the Persona data model and has many number of active User Intentions. Each active User Intention is given a Nickname which is the display name the user sees on the screen, see col. 35, lines 50-57, Figs. 12-14).

It would have been obvious to one ordinary skill in the data processing art at the time of the present invention to combine the teachings of the cited references because the user model of Gottsman's teaching would have allowed Kravets system to provide the most up-to-date information about an event, drawing from a number of resources to the user to react optimally in a given situation, as suggested by Gottsman at col. 39, lines 45-48. Further, user model as taught by Gottsman improves to facilitate web-

based comparison shopping in conventional, physical, non-web real environments (see col. 1, lines 55-57 et seq).

As to claim 73, Kravets discloses a computer implemented method of enhancing query results provided independent of a search engine (col. 1, lines 13-16). Kravets teaches 'a module that sends a query to an independent search engine' as when the user poses a query, the browser generates a number of related queries and sends all the queries to the search engine (col. 11, lines 63-65). Further, Krates teaches 'a module that receives ranked query results from the search engine' as the set of keywords from the search query are used to rank the documents returned by the search engine. The more keywords that appear in a document, the higher the document is ranked. The result organizer outputs results from the highest ranked to the lowest ranked (col. 7, lines 38-43 et seq). Krates teaches 'a module that retrieves,...' as the set of keywords from the search query are used to rank the documents returned by the search engine (Fig 10(b), col. 7, lines 38-40, col. 9, lines 52-64 et seq). Finally, Krates teaches 'a module that re-ranks the query results based on augmented qauery' as the set of keywords from the search query are used to rank the documents returned by the search engine. The more keywords that appear in a document, the higher the document is ranked. The result organizer outputs results from the highest ranked to the lowest ranked (col. 7, lines 38-43 et seq).

Kravets does not explicitly indicate the claimed user model.

Gottsman discloses claimed user model (each User Persona has the Persona data model and has many number of active User Intentions. Each active User

Intention is given a Nickname which is the display name the user sees on the screen, see col. 35, lines 50-57, Figs. 12-14).

It would have been obvious to one ordinary skill in the data processing art at the time of the present invention to combine the teachings of the cited references because the user model of Gottsman's teaching would have allowed Kravets system to provide the most up-to-date information about an event, drawing from a number of resources to the user to react optimally in a given situation, as suggested by Gottsman at col. 39, lines 45-48. Further, user model as taught by Gottsman improves to facilitate web-based comparison shopping in conventional, physical, non-web real environments (see col. 1, lines 55-57 et seq).

As to claim 74, Kravets discloses a computer implemented method of enhancing query results provided independent of a search engine (col. 1, lines 13-16). Kravets teaches 'a module sends a query to an independent search engine' as when the user poses a query, the browser generates a number of related queries and sends all the queries to the search engine (col. 11, lines 63-65). Further, Kravetes teaches 'a module receives query results from the search engine' as the time to receive the complete results for the users query and just the number of matches for each of the related queries is asymptotically the same as the time to receive the results of just the user's query (col. 11, lines 65 to col. 12, line 1 et seq). Kravets teaches 'a module creates a context based on a computer user's interests' as all cluster which receives a yes vote are save along with the query in a search context folder. A user has the ability to find a query and its results by either browsing the search context folders of doing a keyword

based search for them among all the search context folders (col. 7, lines 61-65 et seq). Kravets teaches 'a module retrieves a document identified in the query result' as refining and improving ('enhancing') search queries and for organizing the results of a search query by different and overlapping criteria (col. 1, lines 14-16). Finally, Kravets teaches '...,relevant portions of the document,....' as the number of reformulation iterations used to find the relevant information. When the user poses a query, the browser generates a number of related queries and sends all the queries to the search engine (col. 11, lines 63-65, col. 9, lines 52-64 et seq).

Kravets does not explicitly indicate the claimed user model.

Gottsman discloses claimed user model (each User Persona has the Persona data model and has many number of active User Intentions. Each active User Intention is given a Nickname which is the display name the user sees on the screen, see col. 35, lines 50-57, Figs. 12-14).

It would have been obvious to one ordinary skill in the data processing art at the time of the present invention to combine the teachings of the cited references because the user model of Gottsman's teaching would have allowed Kravets system to provide the most up-to-date information about an event, drawing from a number of resources to the user to react optimally in a given situation, as suggested by Gottsman at col. 39, lines 45-48. Further, user model as taught by Gottsman improves to facilitate web-based comparison shopping in conventional, physical, non-web real environments (see col. 1, lines 55-57 et seq).

As to claim 81, Kravets discloses a computer implemented method of enhancing query results provided independent of a search engine (col. 1, lines 13-16). Kravets teaches 'a module that sends a query to an independent search engine' as when the user poses a query, the browser generates a number of related queries and sends all the queries to the search engine (col. 11, lines 63-65). Further, Krates teaches 'a module that receives query results from the search engine' as the time to receive the complete results for the users query and just the number of matches for each of the related queries is asymptotically the same as the time to receive the results of just the user's query (col. 11, lines 65 to col. 12, line 1 et seq). Krates teaches 'a module that retrieves a document identified in the query result' as refining and improving ('enhancing') search queries and for organizing the results of a search query by different and overlapping criteria (col. 1, lines 14-16). Finally, Kravets teaches 'a module that extracts names from the document and identifying associated links to such names,...' as refining and improving ('enhancing') search queries and for organizing the results of a search query by different and overlapping criteria (col. 1, lines 14-16, col. 9, lines 52-64 et seq).

Kravets does not explicitly indicate the claimed user model.

Gottsman discloses claimed user model (each User Persona has the Persona data model and has many number of active User Intentions. Each active User Intention is given a Nickname which is the display name the user sees on the screen, see col. 35, lines 50-57, Figs. 12-14).

It would have been obvious to one ordinary skill in the data processing art at the time of the present invention to combine the teachings of the cited references because the user model of Gottsman's teaching would have allowed Kravets system to provide the most up-to-date information about an event, drawing from a number of resources to the user to react optimally in a given situation, as suggested by Gottsman at col. 39, lines 45-48. Further, user model as taught by Gottsman improves to facilitate web-based comparison shopping in conventional, physical, non-web real environments (see col. 1, lines 55-57 et seq).

As to claim 86, Kravets discloses a computer implemented method of enhancing query results provided independent of a search engine (col. 1, lines 13-16). Kravets teaches 'a module that sends a query to an independent search engine' as when the user poses a query, the browser generates a number of related queries and sends all the queries to the search engine (col. 11, lines 63-65). Further, Krates teaches 'a module that receives query results from the search engine' as the time to receive the complete results for the users query and just the number of matches for each of the related queries is asymptotically the same as the time to receive the results of just the user's query (col. 11, lines 65 to col. 12, line 1 et seq). Krates teaches 'a module that retrieves a document identified in the query result' as refining and improving ('enhancing') search queries and for organizing the results of a search query by different and overlapping criteria (col. 1, lines 14-16). Finally, Kravets teaches 'a module that extracts names from the document and identifying associated links to such names,..' as

refining and improving ('enhancing') search queries and for organizing the results of a search query by different and overlapping criteria (col. 1, lines 14-16 et seq).

Kravets does not explicitly indicate the claimed user model.

Gottsman discloses claimed user model (each User Persona has the Persona data model and has many number of active User Intentions. Each active User Intention is given a Nickname which is the display name the user sees on the screen, see col. 35, lines 50-57, Figs. 12-14).

It would have been obvious to one ordinary skill in the data processing art at the time of the present invention to combine the teachings of the cited references because the user model of Gottsman's teaching would have allowed Kravets system to provide the most up-to-date information about an event, drawing from a number of resources to the user to react optimally in a given situation, as suggested by Gottsman at col. 39, lines 45-48. Further, user model as taught by Gottsman improves to facilitate web-based comparison shopping in conventional, physical, non-web real environments (see col. 1, lines 55-57 et seq).

As to claim 88, Kravets discloses a computer implemented method of enhancing query results provided independent of a search engine (col. 1, lines 13-16). Kravets teaches 'a module that sends a query to an independent search engine' as when the user poses a query, the browser generates a number of related queries and sends all the queries to the search engine (col. 11, lines 63-65). Further, Krates teaches 'a module that receives query results from the search engine' as the time to receive the complete results for the users query and just the number of matches for each of the

related queries is asymptotically the same as the time to receive the results of just the user's query (col. 11, lines 65 to col. 12, line 1 et seq). Krates teaches 'a module that retrieves a document identified in the query result' as refining and improving ('enhancing') search queries and for organizing the results of a search query by different and overlapping criteria (col. 1, lines 14-16). Finally, Kravets teaches 'a module that extracts names from the document and identifying associated links to such names,...' as refining and improving ('enhancing') search queries and for organizing the results of a search query by different and overlapping criteria (col. 1, lines 14-16).

Kravets does not explicitly indicate the claimed user model.

Gottsman discloses claimed user model (each User Persona has the Persona data model and has many number of active User Intentions. Each active User Intention is given a Nickname which is the display name the user sees on the screen, see col. 35, lines 50-57, Figs. 12-14).

It would have been obvious to one ordinary skill in the data processing art at the time of the present invention to combine the teachings of the cited references because the user model of Gottsman's teaching would have allowed Kravets system to provide the most up-to-date information about an event, drawing from a number of resources to the user to react optimally in a given situation, as suggested by Gottsman at col. 39, lines 45-48. Further, user model as taught by Gottsman improves to facilitate web-based comparison shopping in conventional, physical, non-web real environments (see col. 1, lines 55-57 et seq).

As to claim 92, Kravets discloses a computer implemented method of enhancing query results provided independent of a search engine (col. 1, lines 13-16). Kravets teaches 'sending a query to an independent search engine' as when the user poses a query, the browser generates a number of related queries and sends all the queries to the search engine (col. 11, lines 63-65). Finally Kravets teaches 'independently modeling the query' as the time to receive the complete results for the users query and just the number of matches for each of the related queries is asymptotically the same as the time to receive the results of just the user's query (col. 11, lines 65 to col. 12, line 1 et seq).

Kravets does not explicitly indicate the claimed user model.

Gottsman discloses claimed user model (each User Persona has the Persona data model and has many number of active User Intentions. Each active User Intention is given a Nickname which is the display name the user sees on the screen, see col. 35, lines 50-57, Figs. 12-14).

It would have been obvious to one ordinary skill in the data processing art at the time of the present invention to combine the teachings of the cited references because the user model of Gottsman's teaching would have allowed Kravets system to provide the most up-to-date information about an event, drawing from a number of resources to the user to react optimally in a given situation, as suggested by Gottsman at col. 39, lines 45-48. Further, user model as taught by Gottsman improves to facilitate web-based comparison shopping in conventional, physical, non-web real environments (see col. 1, lines 55-57 et seq).

As to claim 13, kravets teaches 'the information is used to highlight relevant portions of text in the retrieved documents' as refining and improving ('enhancing') search queries and for organizing the results of a search query by different and overlapping criteria (col. 1, lines 14-16 et seq).

As to claim 14, kravets teaches 'documents are retrieved while a user that generated the query may performing other tasks' as refining and improving ('enhancing') search queries and for organizing the results of a search query by different and overlapping criteria (col. 1, lines 14-16 et seq).

As to claim 15, kravets teaches 'a computer readable medium having instructions stored thereon that causes a computer to perform as refining and improving ('enhancing') search queries and for organizing the results of a search query by different and overlapping criteria (col. 1, lines 14-16 et seq).

As to claim 17, kravets teaches 'each new search within the context results in information being generated for documents identified by such search based upon such context' as all cluster which receives a yes vote are save along with the query in a search context folder. A user has the ability to find a query and its results by either browsing the search context folders of doing a keyword based search for them among all the search context folders (col. 7, lines 61-65 et seq).

As to claim 19, kravets teaches 'the query is enhanced based on linguistic analysis' as refining and improving ('enhancing') search queries and for organizing the results of a search query by different and overlapping criteria (col. 1, lines 14-16 et seq).

As to claim 20, kravets teaches 'the linguistic analysis comprises syntactic and semantic analysis' as refining and improving ('enhancing') search queries and for organizing the results of a search query by different and overlapping criteria (col. 1, lines 14-16 et seq).

As to claim 21, kravets teaches 'the query is enhanced based on a general interest profile' as refining and improving ('enhancing') search queries and for organizing the results of a search query by different and overlapping criteria (col. 1, lines 14-16 et seq).

As to claim 22, kravets teaches 'the general interest profile is applied equally to documents accessed by the user in both search and browsing modes' as all cluster which receives a yes vote are save along with the query in a search context folder. A user has the ability to find a query and its results by either browsing the search context folders of doing a keyword based search for them among all the search context folders (col. 7, lines 61-65 et seq).

As to claim 23, kravets teaches 'the query is enhanced based on a model of user interest generated independent of search results' as refining and improving ('enhancing') search queries and for organizing the results of a search query by different and overlapping criteria (col. 1, lines 14-16 et seq).

As to claim 24, kravets teaches 'the information is used to highlight relevant portions of text in the retrieved documents' as all cluster which receives a yes vote are save along with the query in a search context folder. A user has the ability to find a

query and its results by either browsing the search context folders of doing a keyword based search for them among all the search context folders (col. 7, lines 61-65 et seq).

As to claim 25, kravets teaches 'the query is enhanced during retrieval of documents from their sources' as refining and improving ('enhancing') search queries and for organizing the results of a search query by different and overlapping criteria (col. 1, lines 14-16 et seq).

As to claim 26, kravets teaches 'A computer readable medium having instructions stored thereon that cause a computer to perform' as refining and improving ('enhancing') search queries and for organizing the results of a search query by different and overlapping criteria (col. 1, lines 14-16 et seq).

As to claim 28, kravets teaches 'a computer readable medium having instructions stored thereon that cause a computer to perform' as refining and improving ('enhancing') search queries and for organizing the results of a search query by different and overlapping criteria (col. 1, lines 14-16 et seq).

As to claim 31, kravets teaches 'document is divided into sections, and wherein a relevancy score is generated for each section' as all cluster which receives a yes vote are save along with the query in a search context folder. A user has the ability to find a query and its results by either browsing the search context folders of doing a keyword based search for them among all the search context folders (col. 7, lines 61-65 et seq).

As to claim 32, kravets teaches 'the most relevant portion is the section with the highest score' as all cluster which receives a yes vote are save along with the query in a search context folder. A user has the ability to find a query and its results by either

browsing the search context folders of doing a keyword based search for them among all the search context folders (col. 7, lines 61-65 et seq).

As to claim 33, kravets teaches 'one or more sections overlap other sections' as all cluster which receives a yes vote are save along with the query in a search context folder. A user has the ability to find a query and its results by either browsing the search context folders of doing a keyword based search for them among all the search context folders (col. 7, lines 61-65 et seq).

As to claim 34, kravets teaches 'each section is a paragraph' as all cluster which receives a yes vote are save along with the query in a search context folder. A user has the ability to find a query and its results by either browsing the search context folders of doing a keyword based search for them among all the search context folders (col. 7, lines 61-65 et seq).

As to claim 35, kravets teaches 'each section is a sentence' as all cluster which receives a yes vote are save along with the query in a search context folder. A user has the ability to find a query and its results by either browsing the search context folders of doing a keyword based search for them among all the search context folders (col. 7, lines 61-65 et seq).

As to claim 36, kravets teaches ' each section comprises a predetermined number of lines' as all cluster which receives a yes vote are save along with the query in a search context folder. A user has the ability to find a query and its results by either browsing the search context folders of doing a keyword based search for them among all the search context folders (col. 7, lines 61-65 et seq).

As to claim 37, kravets teaches 'a computer readable medium having instructions stored thereon that cause a computer to perform' as a tool to be used with a search engine for a information (Abstract, lines 1-3 et seq).

As to claim 31, kravets teaches 'the names comprise names of people or companies' as as a tool to be used with a search engine for a information (Abstract, lines 1-12 et seq).

As to claim 40, kravets teaches 'the links are internal to the document' as a tool to be used with a search engine for a information (Abstract, lines 1-12 et seq).

As to claim 40, kravets teaches 'the links are external to the document' as a tool to be used with a search engine for a information (Abstract, lines 1-3 et seq).

As to claim 42, kravets teaches 'the names are provided in a list next to the query results to help identify the relevance of documents' as tool to be used with a search engine for a information management system includes methods for refining, filtering, and organizing engine queries and search results. A query tuner in the tool allows a user to automatically reformulate a query in order to find a reasonable number of matching documents from the search engine by selectively modifying individual search terms to be weaker or stronger and concurrently requesting a plurality of searches each with a respectively different modified query (Abstract, lines 1-17 et seq).

As to claim 43, kravets teaches 'a computer readable medium having instructions stored thereon that cause a computer to perform' as tool to be used with a search engine for a information management system includes methods for refining, filtering, and organizing engine queries and search results. A query tuner in the tool allows a

user to automatically reformulate a query in order to find a reasonable number of matching documents from the search engine by selectively modifying individual search terms to be weaker or stronger and concurrently requesting a plurality of searches each with a respectively different modified query (Abstract, lines 1-17 et seq).

As to claim 45, kravets teaches 'the highlighted portions correspond to links back to corresponding portions of text in the document' as tool to be used with a search engine for a information management system includes methods for refining, filtering, and organizing engine queries and search results. A query tuner in the tool allows a user to automatically reformulate a query in order to find a reasonable number of matching documents from the search engine by selectively modifying individual search terms to be weaker or stronger and concurrently requesting a plurality of searches each with a respectively different modified query (Abstract, lines 1-17 et seq).

As to claim 46, kravets teaches 'comprising enhancing the query' refining and improving ('enhancing') search queries and for organizing the results of a search query by different and overlapping criteria (col. 1, lines 14-16 et seq).

As to claim 47, kravets teaches 'the relevancy of the portions is determined based at least partially on the enhanced query' refining and improving ('enhancing') search queries and for organizing the results of a search query by different and overlapping criteria (col. 1, lines 14-16 et seq).

As to claim 48, kravets teaches 'query is enhanced based on linguistic analysis' as tool to be used with a search engine for a information management system includes methods for refining, filtering, and organizing engine queries and search results. A

query tuner in the tool allows a user to automatically reformulate a query in order to find a reasonable number of matching documents from the search engine by selectively modifying individual search terms to be weaker or stronger and concurrently requesting a plurality of searches each with a respectively different modified query (Abstract, lines 1-17 et seq).

As to claim 49, kravets teaches 'query is enhanced based on a general interest profile' refining and improving ('enhancing') search queries and for organizing the results of a search query by different and overlapping criteria (col. 1, lines 14-16 et seq).

As to claim 50, kravets teaches 'the query is enhanced during retrieval of documents' refining and improving ('enhancing') search queries and for organizing the results of a search query by different and overlapping criteria (col. 1, lines 14-16 et seq).

As to claim 51, kravets teaches 'documents are retrieved while a user that generated the query may performing other tasks' refining and improving ('enhancing') search queries and for organizing the results of a search query by different and overlapping criteria (col. 1, lines 14-16 et seq).

As to claim 52, kravets teaches 'a computer readable medium having instructions stored thereon that cause a computer to perform' as tool to be used with a search engine for a information management system includes methods for refining, filtering, and organizing engine queries and search results. A query tuner in the tool allows a user to automatically reformulate a query in order to find a reasonable number of matching documents from the search engine by selectively modifying individual search

terms to be weaker or stronger and concurrently requesting a plurality of searches each with a respectively different modified query (Abstract, lines 1-17 et seq).

As to claim 54, kravets teaches 'the document is divided into sections, and wherein a relevancy score is generated for each section' refining and improving ('enhancing') search queries and for organizing the results of a search query by different and overlapping criteria (col. 1, lines 14-16 et seq).

As to claim 55, kravets teaches 'the most relevant portions are the sections with the highest score' as the set of keywords from the search query are used to rank the documents returned by the search engine. The more keywords that appear in a document, the higher the document is ranked. The result organizer outputs results from the highest ranked to the lowest ranked (col. 7, lines 38-43 et seq).

As to claim 56, kravets teaches 'each section is a sentence' as all cluster which receives a yes vote are save along with the query in a search context folder. A user has the ability to find a query and its results by either browsing the search context folders of doing a keyword based search for them among all the search context folders (col. 7, lines 61-65 et seq).

As to claim 57, kravets teaches 'a computer readable medium having instructions stored thereon that cause a computer to perform' as tool to be used with a search engine for a information management system includes methods for refining, filtering, and organizing engine queries and search results. A query tuner in the tool allows a user to automatically reformulate a query in order to find a reasonable number of matching documents from the search engine by selectively modifying individual search

terms to be weaker or stronger and concurrently requesting a plurality of searches each with a respectively different modified query (Abstract, lines 1-17 et seq).

As to claim 59, kravets teaches 'the query is enhanced based on linguistic analysis' as tool to be used with a search engine for a information management system includes methods for refining, filtering, and organizing engine queries and search results. A query tuner in the tool allows a user to automatically reformulate a query in order to find a reasonable number of matching documents from the search engine by selectively modifying individual search terms to be weaker or stronger and concurrently requesting a plurality of searches each with a respectively different modified query (Abstract, lines 1-17 et seq).

As to claim 60, kravets teaches 'the linguistic analysis comprises syntactic and semantic analysis' as tool to be used with a search engine for a information management system includes methods for refining, filtering, and organizing engine queries and search results. A query tuner in the tool allows a user to automatically reformulate a query in order to find a reasonable number of matching documents from the search engine by selectively modifying individual search terms to be weaker or stronger and concurrently requesting a plurality of searches each with a respectively different modified query (Abstract, lines 1-17 et seq).

As to claim 61, kravets teaches 'the query is enhanced based on a general interest profile' as tool to be used with a search engine for a information management system includes methods for refining, filtering, and organizing engine queries and search results. A query tuner in the tool allows a user to automatically reformulate a

query in order to find a reasonable number of matching documents from the search engine by selectively modifying individual search terms to be weaker or stronger and concurrently requesting a plurality of searches each with a respectively different modified query (Abstract, lines 1-17 et seq).

As to claim 62, kravets teaches 'the general interest profile is applied equally to documents accessed by the user in both search and browsing modes' as tool to be used with a search engine for a information management system includes methods for refining, filtering, and organizing engine queries and search results. A query tuner in the tool allows a user to automatically reformulate a query in order to find a reasonable number of matching documents from the search engine by selectively modifying individual search terms to be weaker or stronger and concurrently requesting a plurality of searches each with a respectively different modified query (Abstract, lines 1-17 et seq).

As to claim 63, kravets teaches 'the query is enhanced based on a model of user interest generated independent of search results' as tool to be used with a search engine for a information management system includes methods for refining, filtering, and organizing engine queries and search results. A query tuner in the tool allows a user to automatically reformulate a query in order to find a reasonable number of matching documents from the search engine by selectively modifying individual search terms to be weaker or stronger and concurrently requesting a plurality of searches each with a respectively different modified query (Abstract, lines 1-17 et seq).

As to claim 64, kravets teaches 'the information is used to highlight relevant portions of text in the retrieved documents' as all cluster which receives a yes vote are save along with the query in a search context folder. A user has the ability to find a query and its results by either browsing the search context folders of doing a keyword based search for them among all the search context folders (col. 7, lines 61-65 et seq).

As to claim 65, kravets teaches 'the query is enhanced during retrieval of documents' as all cluster which receives a yes vote are save along with the query in a search context folder. A user has the ability to find a query and its results by either browsing the search context folders of doing a keyword based search for them among all the search context folders (col. 7, lines 61-65 et seq).

As to claim 66, kravets teaches 'documents are retrieved while a user that generated the query may performing other tasks' as tool to be used with a search engine for a information management system includes methods for refining, filtering, and organizing engine queries and search results. A query tuner in the tool allows a user to automatically reformulate a query in order to find a reasonable number of matching documents from the search engine by selectively modifying individual search terms to be weaker or stronger and concurrently requesting a plurality of searches each with a respectively different modified query (Abstract, lines 1-17 et seq).

As to claim 68, kravets teaches 'the information is used to highlight relevant portions of text in the retrieved documents' as all cluster which receives a yes vote are save along with the query in a search context folder. A user has the ability to find a

query and its results by either browsing the search context folders of doing a keyword based search for them among all the search context folders (col. 7, lines 61-65 et seq).

As to claim 70, kravets teaches 'each new search within the context results in information being generated for documents identified by such search based upon such context' as all cluster which receives a yes vote are save along with the query in a search context folder. A user has the ability to find a query and its results by either browsing the search context folders of doing a keyword based search for them among all the search context folders (col. 7, lines 61-65 et seq).

As to claim 75, kravets teaches 'the document is divided into sections, and wherein a relevancy score is generated for each section' as the set of keywords from the search query are used to rank the documents returned by the search engine. The more keywords that appear in a document, the higher the document is ranked. The result organizer outputs results from the highest ranked to the lowest ranked (col. 7, lines 38-43 et seq).

As to claim 76, kravets teaches 'the most relevant portion is the section with the highest score' as the set of keywords from the search query are used to rank the documents returned by the search engine. The more keywords that appear in a document, the higher the document is ranked. The result organizer outputs results from the highest ranked to the lowest ranked (col. 7, lines 38-43 et seq).

As to claim 77, kravets teaches 'one or more sections overlap other sections' as all cluster which receives a yes vote are save along with the query in a search context folder. A user has the ability to find a query and its results by either browsing the search

context folders of doing a keyword based search for them among all the search context folders (col. 7, lines 61-65 et seq).

As to claim 78, kravets teaches 'each section is a paragraph' as all cluster which receives a yes vote are save along with the query in a search context folder. A user has the ability to find a query and its results by either browsing the search context folders of doing a keyword based search for them among all the search context folders (col. 7, lines 61-65 et seq).

As to claim 79, kravets teaches 'each section is a sentence' as all cluster which receives a yes vote are save along with the query in a search context folder. A user has the ability to find a query and its results by either browsing the search context folders of doing a keyword based search for them among all the search context folders (col. 7, lines 61-65 et seq).

As to claim 80, kravets teaches 'each section comprises a predetermined number of lines' as all cluster which receives a yes vote are save along with the query in a search context folder. A user has the ability to find a query and its results by either browsing the search context folders of doing a keyword based search for them among all the search context folders (col. 7, lines 61-65 et seq).

As to claim 82, kravets teaches 'the names comprise names of people or companies' as all cluster which receives a yes vote are save along with the query in a search context folder. A user has the ability to find a query and its results by either browsing the search context folders of doing a keyword based search for them among all the search context folders (col. 7, lines 61-65 et seq).

As to claim 83, kravets teaches 'the links are internal to the document' as all cluster which receives a yes vote are save along with the query in a search context folder. A user has the ability to find a query and its results by either browsing the search context folders of doing a keyword based search for them among all the search context folders (col. 7, lines 61-65 et seq).

As to claim 84, kravets teaches 'the links are external to the document' as all cluster which receives a yes vote are save along with the query in a search context folder. A user has the ability to find a query and its results by either browsing the search context folders of doing a keyword based search for them among all the search context folders (col. 7, lines 61-65 et seq).

As to claim 85, kravets teaches 'the names are provided in a list next to the query results to help identify the relevance of documents' as tool to be used with a search engine for a information management system includes methods for refining, filtering, and organizing engine queries and search results. A query tuner in the tool allows a user to automatically reformulate a query in order to find a reasonable number of matching documents from the search engine by selectively modifying individual search terms to be weaker or stronger and concurrently requesting a plurality of searches each with a respectively different modified query (Abstract, lines 1-17 et seq).

As to claim 87, kravets teaches 'the highlighted portions correspond to links back to corresponding portions of text in the document' as all cluster which receives a yes vote are save along with the query in a search context folder. A user has the ability to find a query and its results by either browsing the search context folders of doing a

keyword based search for them among all the search context folders (col. 7, lines 61-65 et seq).

As to claim 89, kravets teaches 'the document is divided into sections, and wherein a relevancy score is generated for each section' as the set of keywords from the search query are used to rank the documents returned by the search engine. The more keywords that appear in a document, the higher the document is ranked. The result organizer outputs results from the highest ranked to the lowest ranked (col. 7, lines 38-43 et seq).

As to claim 90, kravets teaches 'the most relevant portions are the sections with the highest score' as the set of keywords from the search query are used to rank the documents returned by the search engine. The more keywords that appear in a document, the higher the document is ranked. The result organizer outputs results from the highest ranked to the lowest ranked (col. 7, lines 38-43 et seq).

As to claim 91, kravets teaches 'each section is a sentence' as all cluster which receives a yes vote are save along with the query in a search context folder. A user has the ability to find a query and its results by either browsing the search context folders of doing a keyword based search for them among all the search context folders (col. 7, lines 61-65 et seq).

As to claim 93, kravets teaches 'the independently modeled query is applied to documents identified by the search engine' as tool to be used with a search engine for a information management system includes methods for refining, filtering, and organizing engine queries and search results. A query tuner in the tool allows a user to

automatically reformulate a query in order to find a reasonable number of matching documents from the search engine by selectively modifying individual search terms to be weaker or stronger and concurrently requesting a plurality of searches each with a respectively different modified query (Abstract, lines 1-17 et seq).

As to claim 94, kravets teaches 'the independently modeled query comprises an enhanced representation selected from the group consisting of an original user description of the query, an augmented query, an original description of an interest profile, an enhanced description of the interest profile, general interest profiles, and a query/interest profile combined with information about the user's task' as tool to be used with a search engine for a information management system includes methods for refining, filtering, and organizing engine queries and search results. A query tuner in the tool allows a user to automatically reformulate a query in order to find a reasonable number of matching documents from the search engine by selectively modifying individual search terms to be weaker or stronger and concurrently requesting a plurality of searches each with a respectively different modified query (Abstract, lines 1-17 et seq).

As to claim 95, kravets teaches 'the independently modeled query is applied to documents accessed in a browse mode' as tool to be used with a search engine for a information management system includes methods for refining, filtering, and organizing engine queries and search results. A query tuner in the tool allows a user to automatically reformulate a query in order to find a reasonable number of matching documents from the search engine by selectively modifying individual search terms to

be weaker or stronger and concurrently requesting a plurality of searches each with a respectively different modified query (Abstract, lines 1-17 et seq).

Remarks

Applicants argues that Kravets does not teach, 'query enhancing based at least in part upon a user model'.

In response to Applicants arguments, the Examiner respectfully submits that in particular, Kravets teaches this limitation as, query page is a form where the student user inserts the text to search and specifies to limit the search only to pages he visited last week. When the form is submitted, the query is split in two other queries. Query goes to the Informix database which has tracked the student's navigation in the course. The Informix database generates a dynamic set of URLs (S2) which Represents (model) the pages he visited last week, see col. 9, lines 4-12. Kravets does not explicitly indicate the claimed user model. Gottsman teaching cures such deficiency by teaching each User Persona has the Persona data model and has many number of active User Intentions. Each active User Intention is given a Nickname which is the display name the user sees on the screen, see col. 35, lines 50-57, Figs. 12-14. It would have been obvious to one ordinary skill in the data processing art at the time of the present invention to combine the teachings of the cited references. Gottsman's teaching of user model would have allowed Kravets system to provide the most up-to-date information about an event, drawing from a number of resources to the user to react optimally in a given situation, as suggested by Gottsman at col. 39, lines 45-48. Further, user model as taught by Gottsman improves to facilitate web-based

comparison shopping in conventional, physical, non-web real environments (see col. 1, lines 55-57 et seq).

Applicants argues that Kravets does not teach, 'creates a context based on a computer user interest,..'.

In response to Applicants arguments, the Examiner respectfully submits that in particular, Kravets teaches this limitation as, all clusters which receive a yes vote are saved along with the query in a search context folder. A user has the ability to find a query and its results by either browsing the search context folders or doing a keyword based search for them among all the search context folders, see col. 7, lines 61-65.

Applicants argues that Kravets does not teach, 'receiving ranked query results from the search engine'

In response to Applicants arguments, the Examiner respectfully submits that in particular, Kravets teaches this limitation as the set of keywords from the search query are used to rank the documents returned by the search engine. The more keywords that appear in a document, the higher the document is ranked. The result organizer outputs results from the highest ranked to the lowest ranked (col. 7, lines 38-43 et seq).

Applicants argues that Kravets does not teach, 'a module that re-ranks the query results based on augmented qauery,...' .

In response to Applicants arguments, the Examiner respectfully submits that in particular, Kravets teaches this limitation as the set of keywords from the search query are used to rank the documents returned by the search engine. The more keywords that appear in a document, the higher the document is ranked. The result organizer outputs

results from the highest ranked ('re-rank') to the lowest ranked (col. 7, lines 38-43, col. 9, lines 52-64 et seq).

Applicants argues that Kravets does not teach 'generating information regarding relevanvancy,...'.

In response to Applicants arguments, the Examiner respectfully submits that in particular, Kravets teaches this limitation as the number of reformulation iterations used to find the relevant information. When the user poses a query, the browser generates a number of related queries and sends all the queries to the search engine (col. 11, lines 63-65 et seq).

Contact Information

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mohammad Ali whose telephone number is (703) 605-4356. The examiner can normally be reached on Monday to Thursday from 7:30am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached on (703) 305-9790 or Customer Service (703) 306-5631. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306 for any communications. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-9600.

Mohammad Ali

Patent Examiner

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